THE ATOM SMOKE ALARM

SL-602 USER MANUAL

FireAngel®

Please read me – as I could save your life.

This user manual is available in large text.
Please call **0800 141 2561**

CONTENTS

INTRODUCTION 2
SENSOR TECHNOLOGY 2
APPLICATION 3
POSITIONING 8
LIMITATIONS 11
HOW TO INSTALL YOUR SMOKE ALARM 15
1 Preparation
2 Install mounting ring
3 Fit your smoke alarm
4 Test your smoke alarm
OPERATION 18
Normal Condition
Low Battery Condition
BATTERY REPLACEMENT 19
ALARM TEST 22
ALARM SILENCE 24
ROUTINE MAINTENANCE 27
WHAT TO DO IN CASE OF FIRE IN YOUR HOME 29
REPAIR 31
TROUBLESHOOTING 32
DISPOSAL 38
HOW TO MAKE YOUR HOME SAFER 39
WARRANTY 43
RETURNS 46
PRODUCT RANGE 48

INTRODUCTION

Congratulations! You've made a wise investment in your personal safety with this innovative product.

This user manual contains important information regarding the operation of your FireAngel smoke alarm. Ensure you read this manual fully before installing and operating the alarm. If you are installing this smoke alarm for use by others, you must leave this manual (or a copy of it) with the end user.

SENSOR TECHNOLOGY

There are two main types of smoke alarms. Optical alarms are generally more effective at detecting slow burning fires which can smoulder for hours before bursting into flames. Ionisation type smoke alarms are generally more effective at detecting fast, flaming fires. Alarms conforming to European Standard EN 14604:2005 must respond to both fire types within specified time frames. The ATOM SL-602 uses an optical (photoelectric) type sensor to

detect the presence of smoke.

For maximum protection, use both types of smoke alarms on each level of your home.

APPLICATION

Your smoke alarm typically meets the minimum requirements for family living units in existing buildings, as long as at least one unit is installed on each floor/level of your property.

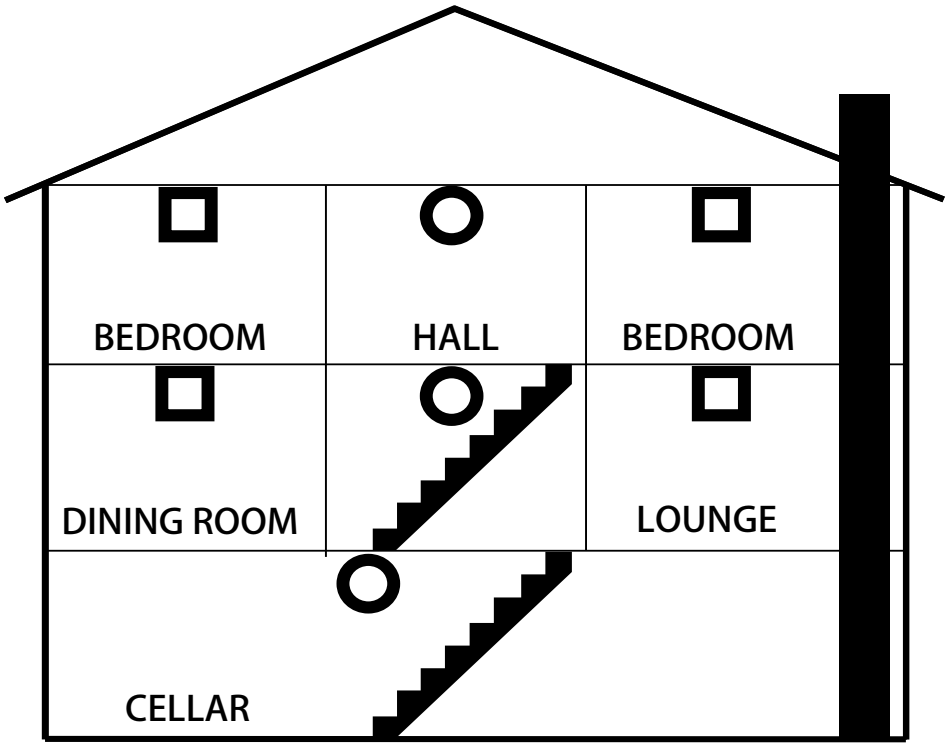
In order to achieve the earliest fire warning, we recommend that a smoke alarm is fitted in all rooms where the temperature is normally between 4°C (40°F) and 38°C (100°F). The type of smoke alarm used in each location should be

appropriate to the environment. Check the section on 'Positioning' to ensure that the smoke alarm is to be correctly positioned for the particular dwelling into which it is intended to be installed.

WARNING: Your FireAngel smoke alarm can be installed into a new build property as additional protection to an existing smoke detection system only. It cannot be used as a substitute for a hard wired system as required in new build properties. In this type of property the building regulations require alarms to be interlinked. You can obtain further information from your local fire service or building control department at your local council offices. These sources generally provide advice on new builds or projects that require planning permission.

WARNING: The alarm positions shown overleaf are based on typical homes. Construction and layout of individual dwellings will vary, so this should be regarded only

as a guide. Check with your local fire station for further guidance.



EXISTING HOMES

MINIMUM RECOMMENDATIONS

RECOMMENDED FOR ADDITIONAL PROTECTION

NOTE: Kitchens should be covered by a self contained heat detector.

Multi-family or mixed occupant residence (Tenancy building, student accommodation)

Your FireAngel smoke alarm can also be used in individual flats and bedsits, providing the same conditions are met as for a single-family residence. However, there must already be a primary fire detection system that meets regulatory requirements for common areas such as lobbies and hallways.

Institutions and Hotels

This includes motels, hospitals, day care facilities, long-term health care facilities, boarding houses and dormitories. Your smoke alarm can be used in individual sleeping/ resident rooms, providing the same conditions are met as for a single-family residence. However, there must already be a primary fire detection system that meets regulatory requirements for common areas such as lobbies and hallways. Use of this smoke alarm in common areas may not provide sufficient fire warning to residents or meet regulatory requirements.

This smoke alarm is designed to operate as a standalone smoke alarm.

WARNING: This FireAngel smoke alarm will not communicate with other smoke alarms or fire alarm systems. It is not intended as a substitute for a complete alarm system.

Mobile Homes and Caravans

This smoke alarm is not suitable for use in mobile homes and caravans.

Commercial and Industrial Premises

This smoke alarm is not intended for any non-residential, commercial or industrial application, nor for any other purpose than described above.

POSITIONING

Optical smoke alarms are less prone to false alarms from cooking fumes, and are therefore suitable for locations near kitchens. However optical smoke alarms are more susceptible to nuisance alarms from steam and should not be located too close to bathrooms and showers.

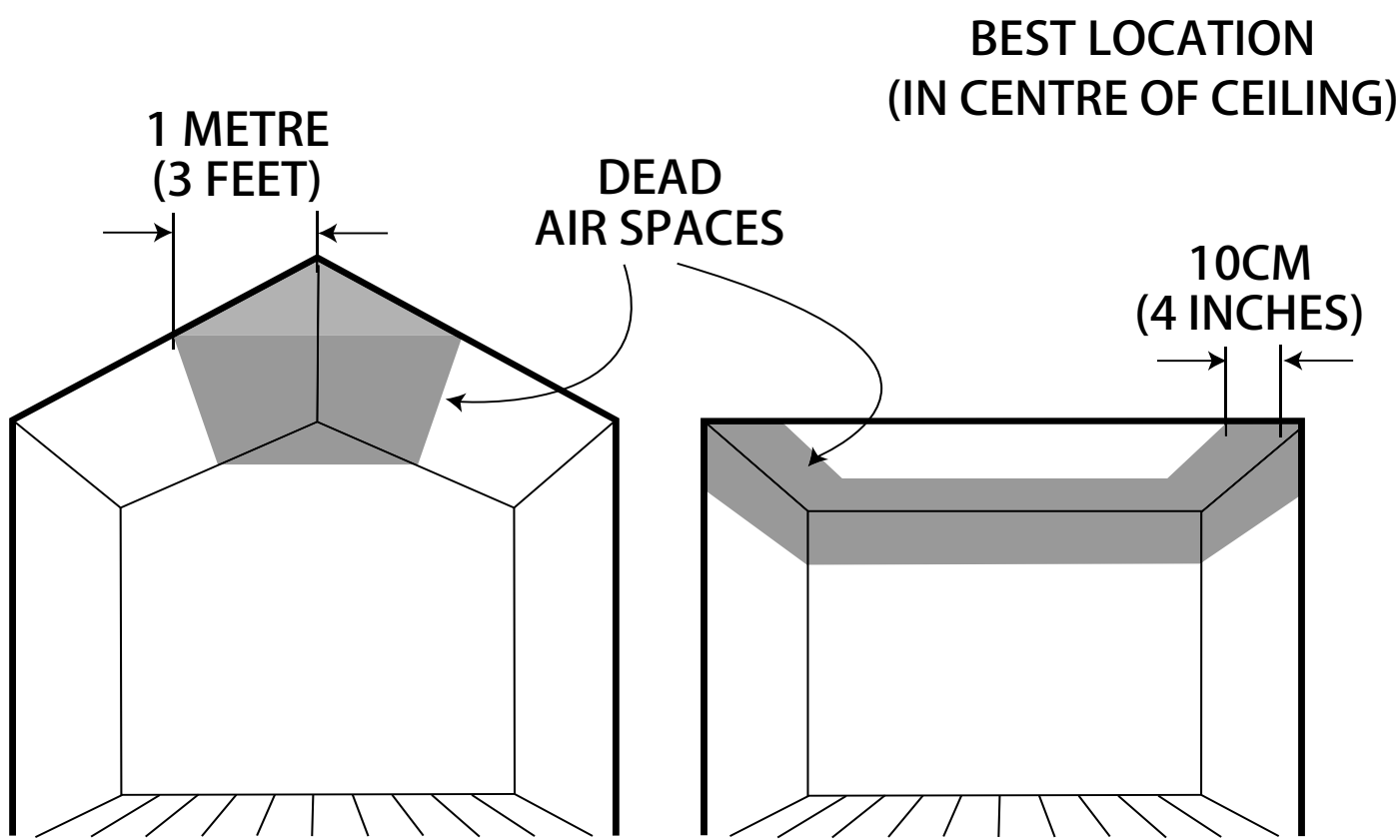
It is recommended that your FireAngel smoke alarm is NOT to be fitted in the following locations:

- Bathrooms, shower-rooms, and other very damp or humid areas, where the moisture can cause unwanted alarms.
- Kitchens. Kitchens should be protected with self-contained Heat Alarms, as the combustion particles from cooking in kitchens will result in unwanted alarms and permanent contamination of the smoke alarm's sensor.
- In areas where excessive dust or dirt could contaminate the sensing chamber, making it over

sensitive or impairing smoke entry.

- In areas where the ambient temperature is not controlled and may regularly drift below 4°C (40°F) or above 38°C (100°F) e.g. unheated buildings, open attic spaces.
- Very dirty, dusty or greasy areas.
- In very draughty areas, such as close to ceiling fans or fresh air vents. Draughts can blow smoke away from the alarm.
- In insect infested areas. Insects can clog openings to the sensing chamber, preventing smoke entry or causing unwanted alarms.
- Within 30cm (12") of a fluorescent light fitting which emits electrical 'noise' that can prevent correct alarm operation.
- Within 30cm (12") of a wall, light fittings or other ceiling based obstructions.
- In 'dead air' spaces (see following diagram).

- Within 30cm (12”) of light fittings or other ceiling based obstructions.



WHAT ARE THE LIMITATIONS OF MY SMOKE ALARM?

Your FireAngel smoke alarm is designed to alert you by sounding an alarm when it senses smoke, i.e. it can only sense smoke and alert you if smoke reaches it! If a fire develops in an area remote from the location of the smoke alarm, such as another room or another level, smoke may not reach the smoke alarm in sufficient time or quantity to sense and alert you to the danger.
For comprehensive coverage a smoke alarm should also be fitted in every room.

This smoke alarm cannot be used to provide primary fire detection in common areas used by different residents such as blocks of flats and hotels. The FireAngel smoke alarm may not alarm before a fire causes damage, injury or death, as the smoke may not reach the smoke alarm in time. Examples include smoking in bed and violent gas explosions. This smoke alarm may not respond in a reasonable time if it

is not installed in the best position, or if furniture or other obstacles are located between the smoke alarm and the fire.

WARNING: Your smoke alarm will not operate without a battery installed. Only batteries listed on page 20 should be used and should be changed immediately when the low battery signal is given or the unit may fail. Test monthly, and read and follow all instructions or the unit may not operate properly.

Your FireAngel smoke alarm will advise you of a low battery condition by emitting an audible 'chirp' every 48 seconds. When this occurs you must change the battery in the unit within 30 days to maintain correct operation.

IMPORTANT: Smoke alarms are designed to alert you with an audible alarm at a level specified by the European Standard EN 14604: 2005. Closed doors, walls and high ambient noise levels will reduce this

level. Temporary or permanently impaired hearing may result in the alarm not being heard. Stereos, traffic and other loud sources may also prevent the alarm being heard. Heavy sleepers and residents under the influence of alcohol or drugs may also not hear or respond to the alarm. Test and check that you can hear the alarm in all circumstances. If in doubt install additional smoke alarms as required.

WARNING: The Smoke alarm is not suitable for alerting hearing impaired residents. We recommend that specially designed warning systems be installed that will alert hearing impaired residents.

WARNING: The smoke alarm accompanying this manual is independently tested as being compliant with all the relevant European Standards. However, as with any electronic product it may fail and may not sense all types of

fire within sufficient time to alert you of the danger and provide adequate time for your escape. In order to maximise your level of safety always test your smoke alarm frequently to ensure it is in full working order. Your FireAngel smoke alarm is only suitable for use in domestic/ residential applications as covered in this manual. It is not suitable for commercial or industrial applications. It is designed to sense smoke and alert you. It will not sense carbon monoxide, flames, heat or gas. It will not prevent or extinguish fires.

This FireAngel smoke alarm has a limited life of 10 years and should not be considered as a substitute for life or property insurance. Like all electronic equipment, it can wear out or fail. It should be tested monthly and replaced immediately in the event of failure, and replaced after 10 years regardless.

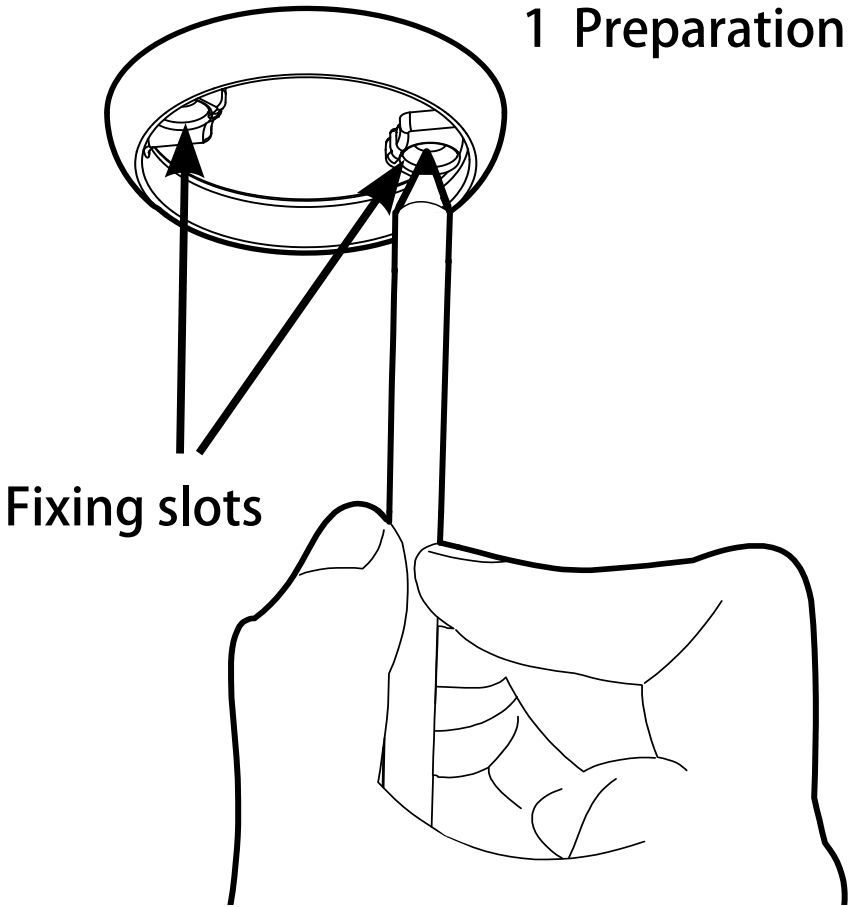
HOW TO INSTALL YOUR SMOKE ALARM

IMPORTANT: Make sure you have read and understood this manual before installing your smoke alarm.

1 Preparation

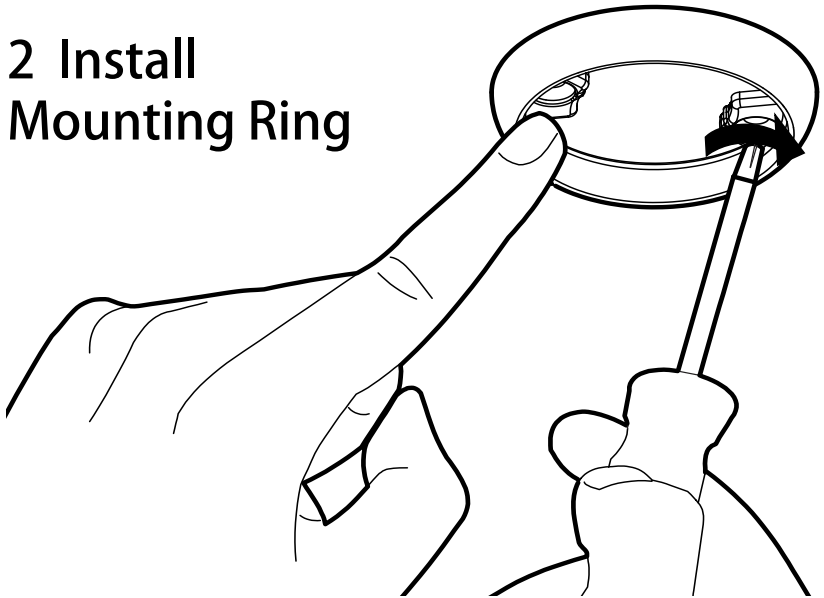
Attach the mounting ring to the ceiling as follows:

Use the two fixing slots on the mounting ring as a guide when marking the position of the drill holes. With an appropriately sized drill, drill the holes and insert the plastic fixing anchors supplied (if needed). See diagram overleaf.



2 Install Mounting Ring

Fit the mounting ring to the ceiling using the screws provided. Ensuring that the screw heads are flush.

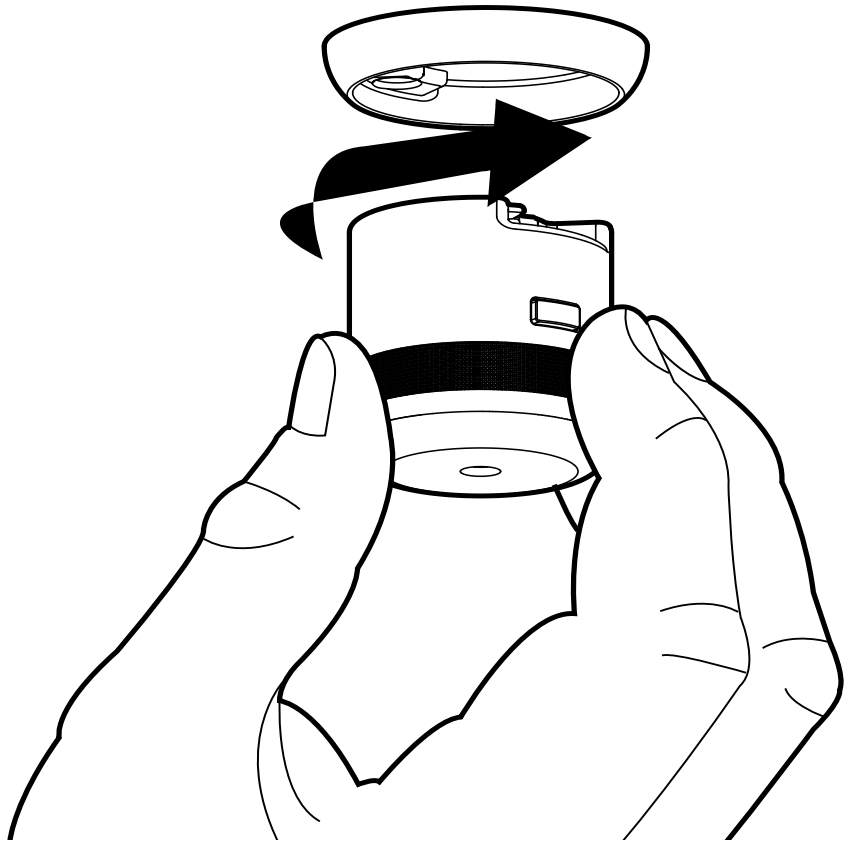


IMPORTANT: Activate the battery before installing your smoke alarm by removing the clear plastic battery spacer from underneath the battery, ensuring the battery remains in place.

3 Fit Your FireAngel Smoke Alarm

Position the smoke alarm over the mounting ring and turn clockwise. You should feel the alarm click into place. The alarm will only attach to the mounting ring with the battery in place.

3 Fit Your FireAngel Smoke Alarm



4 Test Your FireAngel Smoke Alarm

See ‘Alarm Test’ on page 22.

OPERATION

Normal Condition

The combined red LED and test button on the side of the alarm should flash once every 48 seconds to show the alarm is active.

Low Battery Condition

IMPORTANT: Your smoke alarm requires a battery with a sufficient capacity of power to operate correctly. This must also be correctly installed.

Should your FireAngel smoke alarm enter a low battery condition, the unit will emit an audible 'chirp' once every 48 seconds. When this occurs you should replace the battery immediately. Your FireAngel smoke alarm will continue to warn of this low battery condition for at least 30 days, however, failure to change the battery after this time would mean your smoke alarm has insufficient power to alert you in a real fire situation.

BATTERY REPLACEMENT

IMPORTANT: Only use CR2 size 3V Lithium batteries for replacement. Use of a battery other than that recommended may have a detrimental effect on the detector's operation. Use of the recommended battery should provide power for 5 years under normal operating conditions, meaning there is no need for an annual battery change.

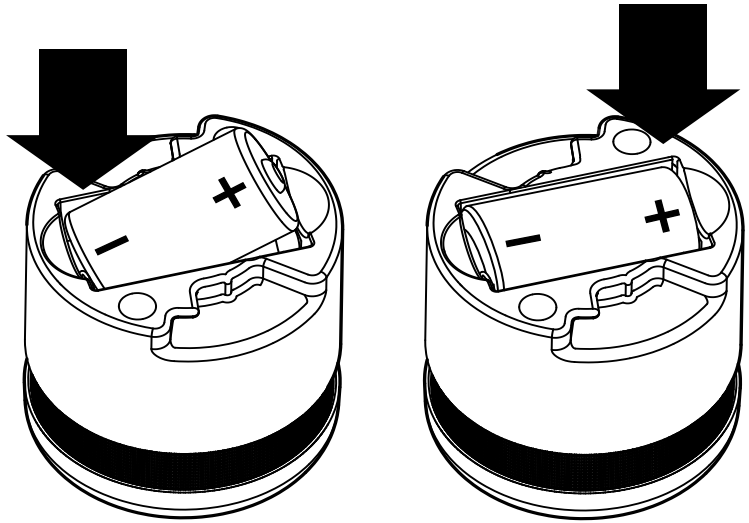
Recommended Battery:
CR2 3V Lithium Battery

Replacing the battery

The battery is designed to last for at least 5 years. When the battery nears the end of its life, the smoke alarm emits a low battery chirp every 48 seconds to warn you to replace the battery.

CAUTION: The horn is designed to be loud to wake you in an emergency. Avoid placing your ear close to the alarm when installing battery.

a Remove the alarm from its mounting ring by turning anti-clockwise

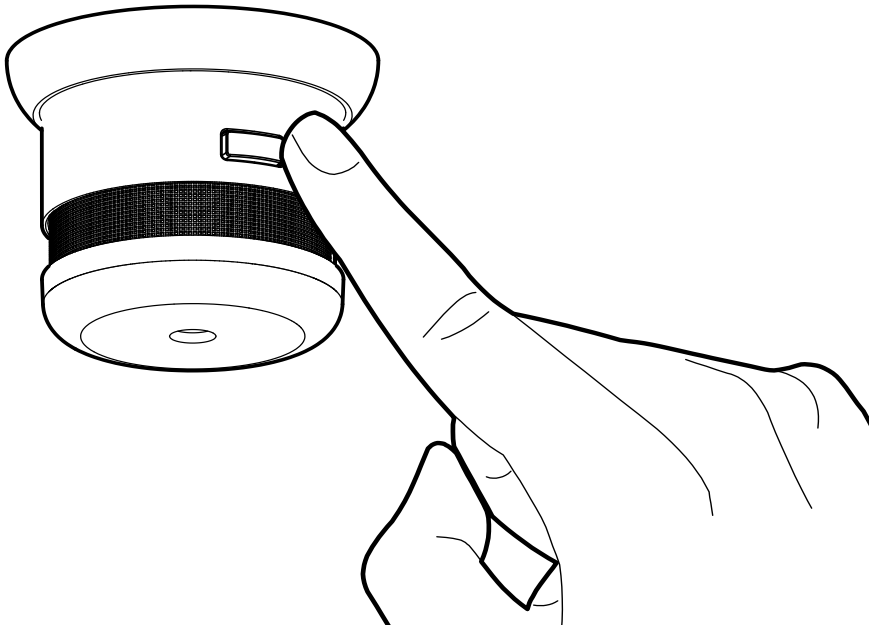


b Remove the existing battery and replace with a new CR2 size 3V Lithium battery making sure that the positive and negative connections of the battery are in the correct position and that the battery label is folded and kept outside of the battery aperture. The red LED on the test button should now flash every 48 seconds to show the alarm is active.

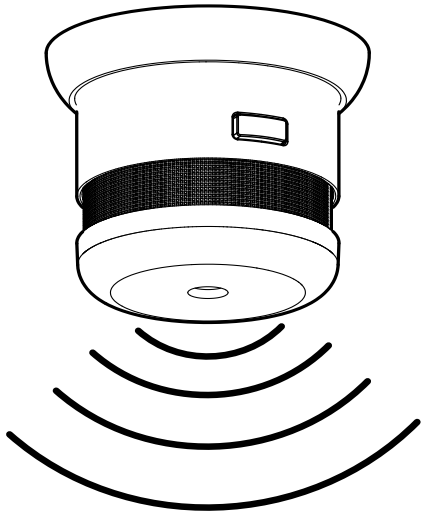
c Replace the alarm on its mounting ring. Position the smoke alarm over the mounting ring and turn clockwise you should feel the alarm click into place.

d Test your alarm as explained in the next section 'Alarm Test'.

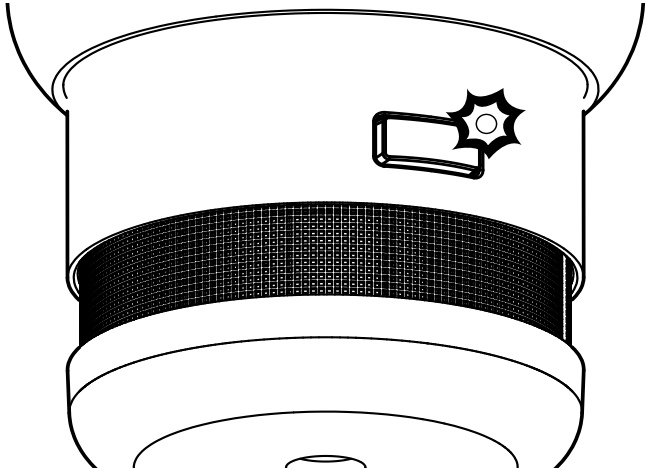
ALARM TEST



a Press the combined LED and test button on the side of the alarm.



b The unit will emit a loud (85dB at 3 meters) alarm, while the test button is depressed.



c The red LED on your alarms test button will flash rapidly during the audible signal.

NOTE: The test button accurately tests the alarm's smoke sensing circuit. There is no need to test your alarm with smoke. If your smoke alarm fails to give an audible test signal, please refer immediately to the troubleshooting guide at the end of this manual.

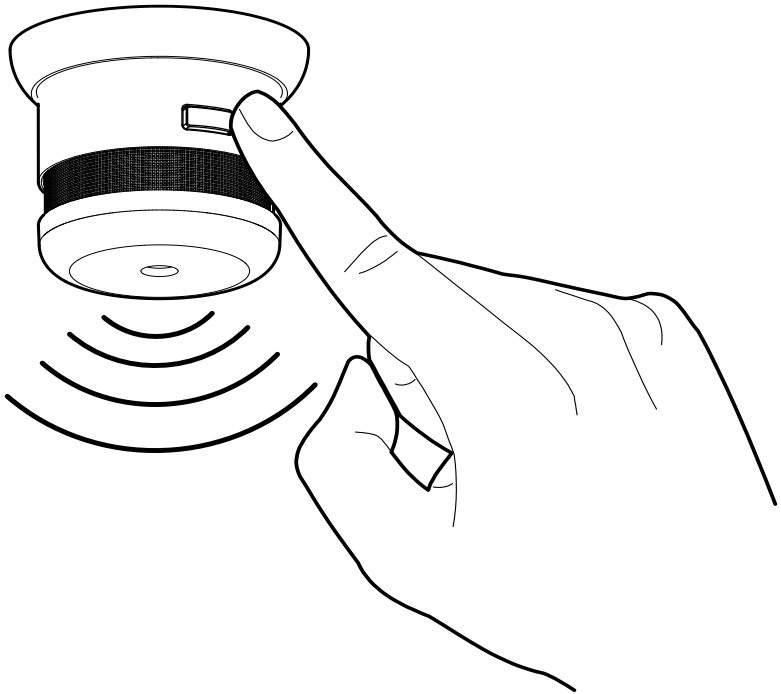
WARNING: Test your smoke alarm at least once per month.

ALARM SILENCE

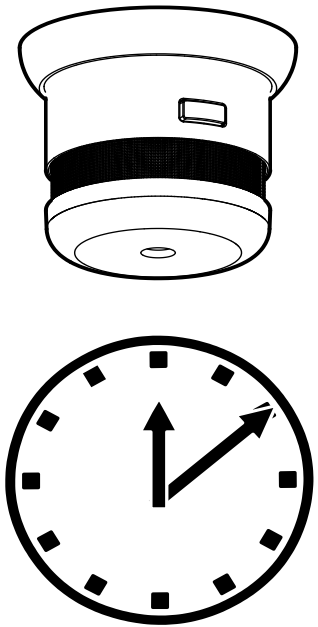
Your smoke alarm has a temporary silence feature. Smoke alarms can sometimes react to cooking fumes or other non emergency situations. Should your alarm sound, the test button on the side of the alarm can be pressed to temporarily silence the alarm. Your alarm will automatically switch itself back on within 10 minutes.

DANGER: If your FireAngel smoke alarm emits the full alarm signal and you are not testing the unit, the smoke alarm is warning you of a potentially dangerous situation that requires your immediate attention. Only use the alarm silence function after making sure that there is no ongoing fire emergency situation. Do not block the vents on the alarm or disable the smoke alarm in any way, as this will remove your protection. In the event of a known false alarm such as cooking fumes your smoke alarm can be silenced in the following way.

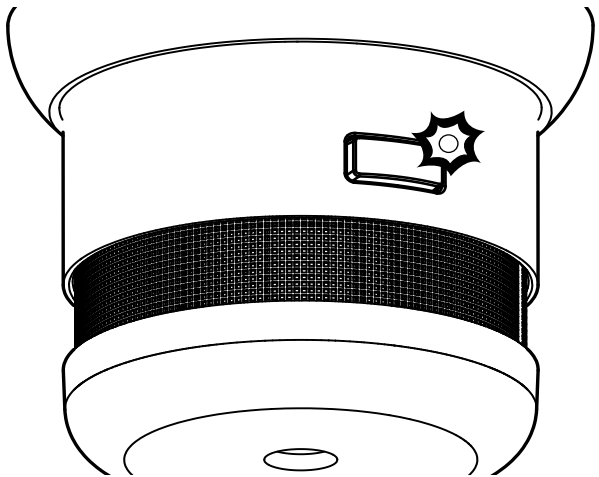
a Press and release the test button. The alarm sound will immediately stop.



b Your alarm will silence and switch off for approximately 10 minutes and then automatically switch itself back on.



c If you wish to switch the alarm back on before the 10 minutes has passed, simply push the test button again. The alarm will sound and the red LED will revert to flashing once every 48 seconds.



DANGER: Never ignore any alarm. Ignoring the alarm may result in injury or death. If your smoke alarm activates and alarms and you are not absolutely certain of the source of the smoke, get everyone out of the house immediately.

ROUTINE MAINTENANCE

Your FireAngel smoke alarm has been designed to be as maintenance-free as possible and although the unit requires only battery maintenance for its entire life, there are several things you must do to keep it working properly.

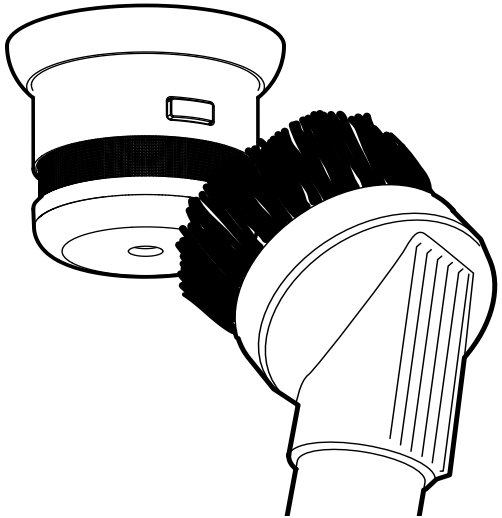
CAUTION: Your FireAngel smoke alarm is a sealed electrical device and no attempt should be made to open the case. Attempting to open the case will invalidate your Warranty.

Testing

Test your smoke alarm once every month see section 'Alarm Test' on page 22. Any test failures should be reported to the FireAngel Technical Support Team see page 25.

Cleaning

As a minimum your smoke alarm should be cleaned once every month using your vacuum cleaner fitted with a soft brush attachment.



WARNING: Your FireAngel smoke alarm may false alarm when it is being cleaned using a vacuum cleaner.

IMPORTANT: Do not use solvents or cleaners on your FireAngel smoke alarm, as they may cause damage to the sensor or circuitry. The unit can be wiped with a slightly damp cloth.

CAUTION: Do not paint the smoke alarm as this may block the openings and prevent smoke from entering the sensor.

WHAT TO DO IN CASE OF A FIRE IN YOUR HOME

- If you have made a family escape plan and practiced it with your family, you have increased their chances of escaping safely. Go over the following rules with your children each time you have fire drills. This will help everyone remember them in case of a real emergency.
- Don't panic, stay calm. Your safe escape may depend on thinking clearly and remembering what you have practiced.
- Notify every member in the residence of the fire.
- Get out of the house as quickly as possible. Follow a planned escape route. Do not stop to collect anything or to get dressed.

- Feel the doors to see if they are hot. If they are hot, do not open them – use an alternative escape route.
- Stay close to the floor. Smoke and hot gases rise.
- Cover your nose and mouth with a cloth (wet if possible). Take short, shallow breaths.
- Keep doors and windows closed. Open them only if you have to in order to escape.
- Meet at your planned meeting place after leaving the house. Carry out a headcount.
- Call the Fire brigade on 999 as soon as possible from outside your house. If possible use a neighbours phone or phone box rather than a mobile phone (as the location can be traced from the number if the line is lost, or the battery runs out for example).
- Give the address and your name.

- Never go back inside the building until a member of the fire service has told you it is safe to do so.

Contact your local Fire Brigade. They will give you more ideas about how to make your home safer from fires and how to plan your family's escape.

REPAIR

DO NOT attempt to repair your FireAngel smoke alarm doing so will invalidate your warranty. If your smoke alarm is not operating properly, see the next section 'Troubleshooting'. If you cannot solve the problem, please call the Technical Support Line, see page 37

If your FireAngel smoke alarm is no longer under warranty, replace immediately with a comparable FireAngel brand smoke alarm.

TROUBLESHOOTING

Problem	Solution
Your FireAngel smoke alarm does not test when installed or when the battery has been replaced	• Make sure you have installed the battery correctly – see pages 17 & 22.
Your FireAngel smoke alarm chirps intermittently	• Replace battery. If the battery has been recently fitted and the chirping continues then contact technical support, see page 37.

Your FireAngel smoke alarm chirps intermittently	• Check the location of your smoke alarm (see 'Application & Positioning'). • Check that your smoke alarm is definitely the source of chirping; make sure the noise isn't coming from another alarm (smoke/carbon monoxide/gas/burglar alarm) by process of elimination.

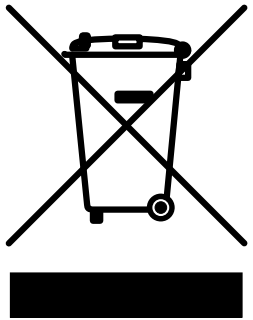
Your FireAngel smoke alarm activates when no smoke is visible	• Check the location of your smoke alarm (see the section on ‘Positioning’). • Clean the smoke alarm (see the section on ‘Routine Maintenance’).

You experience frequent unwanted alarms	• Check the location of your FireAngel smoke alarm (see the section on 'Positioning'). • Clean the smoke alarm (see the section on 'Routine Maintenance'). • If the frequent unwanted alarms continue contact technical support for advice.

Your FireAngel smoke alarm does not sound during testing	• Make sure you push the test button firmly • If the unit has been silenced it is switched off and will not test. Pressing the button will switch the alarm back on. Press again to test the alarm. • Replace battery. If the battery has been recently fitted and the alarm still fails to self test then contact technical support.

Alarm continues not to operate correctly.	If you have any questions about the operation of your alarm, please contact the **FireAngel Technical Support Team** between 9am - 5pm Monday – Friday. Telephone: **0800 141 2561 (1-800 523171 in Eire)** or e-mail: **technicalsupport@fireangel.co.uk** You can also visit the support section of our website **www.fireangel.co.uk**

DISPOSAL



Waste electrical products should not be disposed of with regular household waste. Please recycle where facilities exist. Check with your local authority, retailer or the FireAngel Technical Support Line (see page 37 for contact details) for recycling/disposal advice as regional variations apply.

The battery should be removed before disposal of the smoke alarm. Both the battery and the smoke alarm should be disposed of in line with current regulations.

You can also return your smoke alarm to us for disposal. For return address see the section on Returns, see page 46. Please include a note confirming the product is being returned for disposal.

HOW TO MAKE YOUR HOME SAFER

Installing smoke alarms is only one step in protecting your family from fires. You must also take steps to reduce the chances of fires starting in your home. If a fire does start, you must increase your chances of escaping.

To have a good fire safety program you must:

1 Install smoke alarms properly.

Carefully follow ALL the instructions in this manual. Keep your smoke alarms clean, and test them every week.

SMOKE ALARMS THAT DO NOT WORK WILL NOT ALERT YOU.

2 Replace your smoke alarms immediately if they are not working properly.

3 **Follow fire safety rules, and prevent hazardous situations:**

- Use smoking materials properly.

Never smoke in bed.

- Keep matches and cigarette lighters away from children.
- Store flammable materials in proper containers. Never use them near an open flame or sparks.
- Keep electrical appliances and wiring in good condition. Do not overload electrical circuits.
- Keep cookers, fireplaces, chimneys, and barbecue grills grease free. Make sure they are properly installed, away from any combustible materials.
- Keep portable heaters and open flames such as candles away from combustible materials.
- Do not allow rubbish to accumulate inside your home as this provides sources for combustion.
- Keep a supply of extra batteries on hand for your battery powered Smoke Alarms.

4 Develop a family escape plan and practice it with everyone in the household, including small children if you have them.

- Draw a floor plan of your home, and find two ways to exit from each room. There should be one way to get out of each bedroom without opening the door, and alternate means of escape from an upper floor in the event of the stairs being blocked (such as a fire escape).
- Make sure everyone recognises the smoke alarm signal and knows how to react to it.
- If there are small children to consider it is important to explain to them what the smoke alarm signal means. Teach them that they must be prepared to leave the home by themselves if necessary. Show them how to check to see if doors are hot before opening them. Show them how to stay close to the floor and crawl if

necessary. Show them how to use an alternative exit if the door is hot and should not be opened.

- Decide on a meeting place a safe distance from your house. Again, if you have them, make sure that all your children understand that they should go and wait for you there if there is a fire.
- Hold fire drills at least every 6 months to make sure that everyone, including small children, know what to do to escape safely.
- Know where to go to call the Fire Brigade from outside your home. Contact your local Fire Brigade. They will give you more ideas about how to make your home safer from fires and how to plan your family's escape.

WARRANTY

Sprue Safety Products Ltd warrants to the original purchaser that its enclosed smoke alarm be free from defects in materials and workmanship under normal residential use and service for a period of 2 (two) years from the date of purchase. Provided it is returned with postage prepaid and proof of purchase date, Sprue Safety Products Ltd hereby warrants that during the 2 (two) year period commencing from the date of purchase Sprue Safety Products Ltd, at its discretion, agrees to replace the unit free of charge. The warranty on any replacement SL-602 alarm, will last for the remainder of the period of the original warranty in respect of the alarm originally purchased – that is from the date of original purchase and not from the date of receipt of the replacement product. Sprue Safety Products Ltd reserves the right to offer an alternative product similar to that

being replaced if the original model is no longer available or in stock. This warranty applies to the original retail purchaser from the date of original retail purchase and is not transferable. Proof of purchase is required.

This warranty does not cover damage resulting from accident, misuse, disassembly, abuse or lack of reasonable care of the product, or applications not in accordance with the user manual. It does not cover events and conditions outside of Sprue Safety Products Ltd's control, such as Acts of God (fire, severe weather etc.). It does not apply to retail stores, service centres or any distributors or agents. Sprue Safety Products Ltd will not recognise any changes to this warranty by third parties.

Sprue Safety Products Ltd shall not be liable for any incidental or consequential damages caused by the breach of any expressed or

implied warranty. Except to the extent prohibited by applicable law, any implied warranty of merchantability or fitness for a particular purpose is limited in duration for 2 (two) years.

This warranty does not affect your statutory rights. Except for death or personal injury, Sprue Safety Products Ltd shall not be liable for any loss of use, damage, cost or expense relating to this product or for any indirect, or consequential loss, damages or costs incurred by you or any other user of this product.

This warranty does not cover the battery, which is considered a user replaceable part.

RETURNS

We recommend that you contact the FireAngel Technical Support Line in the first instance on **0800 141 2561**, or callers from EIRE dial **1-800 523171**. As we may be able to remedy the problem quickly over the phone (this is to prevent unnecessary returns that take a longer time to process). Alternatively e-mail:

technicalsupport@fireangel.co.uk

If there is a fault that we are unable to resolve then our technical support team member will provide you with a returns authority number so that your product can be returned for testing.

To return your FireAngel smoke alarm under warranty, send it suitably packed with the battery removed with postage prepaid; a note indicating the returns authority number and describing the reason for return, with proof of purchase to:

Sprue Safety Products Ltd
Vanguard Centre
Sir William Lyons Road
Coventry CV4 7EZ UK

PRODUCT RANGE

Sprue Safety Products Ltd. manufactures an extensive range of home safety products including smoke alarms, carbon monoxide alarms, fire extinguishers and remote sounding devices. For more details visit

www.fireangel.co.uk

The ATOM Smoke Alarm
by FireAngel

design by

CAVIUS

in Denmark

Exclusively distributed in the UK by FireAngel
Manufactured by Cavius Aps, Denmark, 8600 Silkeberg

CE

SL-602
0359-CPD-0059
Smoke alarm devices
EN 14604:2005

GN1309/S2/R2

The ATOM is everything you'd expect in a first class smoke alarm. It's quick and easy to fit, the replaceable battery will last for 5 years, the optical sensor will reduce nuisance alarms from cooking fumes, it has award winning design, and it's **much smaller** than standard alarms.

Long life 5 year battery

Quick and easy fit

Less nuisance alarms